

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Gregory R. Hintermeister, et al.
Serial No.: 10/767,044
Filed: January 29, 2004
For: MULTI-IMAGE FILE APPARATUS AND METHOD
Group Art Unit: 2176
Confirmation No.: 4831

APPEAL BRIEF IN SUPPORT OF APPEAL FROM
THE PRIMARY EXAMINER TO THE BOARD OF APPEALS

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant(s) hereby submit an appeal brief in support of the appeal to the Board of Appeals from the decision dated August 14, 2006, of the Primary Examiner finally rejecting claims 1-21.

The appeal brief fee of \$500.00 is:

- ☐ Enclosed.
- ☐ Not required. (Fee paid in prior appeal.)
- ☒ Charged to Deposit Account No. 09-0465. A duplicate copy of this sheet is enclosed.

Table of Contents

1. Real party in interest.....	3
2. Related appeals and interferences	4
3. Status of claims	5
4. Status of amendments.....	6
5. Summary of claimed subject matter	7
6. Grounds of rejection to be reviewed on appeal	9
7. Argument.....	10
8. Claims appendix.....	16
9. Evidence appendix	21
10. Related proceedings appendix.....	22

1. Real Party in Interest

The real party in interest is International Business Machines, Inc., the assignee of the above-identified application.

2. Related Appeals and Interferences

There are no related appeals or interferences for the above-identified application.

3. Status of Claims

Claims 1-21 are currently pending.

In the Office Action mailed August 14, 2006, the Examiner: (i) rejected claims 16-21 under 35 U.S.C. § 101 as directed to non-statutory subject matter; (ii) rejected claims 1, 7-11, and 13-21 under 35 U.S.C. § 102(b) as anticipated by Munro et al, US 2002/0089549 ("Munro"); (iv) rejected claims 5-6 under 35 U.S.C. 103(a) as unpatentable over Munro in view of Miller, et al. US 2005/0185055 A1 ("Miller"); and (v) rejected claims 2-4 and 12 under 35 U.S.C. 103(a) as unpatentable over Munroe in view of Tucker et al 2004/00490598 A1 ("Tucker").

4. Status of Amendments

Applicant filed an Amendment on June 5, 2006, which was entered by the Examiner as part of the Office Action mailed August 14, 2006.

Applicant also filed an Amendment on October 23, 2006. This Amendment canceled seven claims and rewrote two claims in independent form. The Office Action mailed November 14, 2006 indicates that the Examiner did not enter this Amendment on the grounds that rewriting the two dependent claims into independent form constituted "reciting new limitations." *Office Action mailed November 14, 2006, continuation sheet.* Accordingly, the claims reproduced in Section 8 do not include the October 23, 2006 changes.

5. Summary of Claimed Subject Matter

Claim 1 is directed at a method of displaying a web page. This method comprises receiving a multi-image file, receiving a web page containing a markup language tag, and displaying the web page. *Figs. 3A-3B; pg. 3, lines 4-12*. The claim further states that the multi-image file comprises a plurality of independent images adapted for cooperative display and that the markup language tag comprises a code specifying which of the plurality of images should be displayed. *E.g., Figs. 5-7; pg. 5, lines 1-13, pg. 7, lines 6-15*.

Claim 9 is directed at a web page comprising a multi-image file and a markup language tag. *E.g., figs. 3A-3B; pg. 3, lines 13-20*. The claim further states that the multi-image file comprises a plurality of images including a primary image and at least one secondary image adapted for cooperative display, and that the markup language tag comprises a code specifying which of the plurality of images should be displayed. *E.g., figs. 5-7; pg. 5, lines 1-13, pg. 7, lines 6-15*.

Claim 13 is directed at a method of displaying images, comprising receiving a multi-image file, selecting an image for display from the multi-image file, and displaying the selected image. *E.g., figs. 3A-3B; pg. 3, lines 21-25*. The claim further states that the multi-image file comprises a plurality of independent images including a primary image and at least one secondary image. *E.g., figs. 5-7; pg. 5, lines 1-13, pg. 7, lines 6-15*.

Claim 16 is directed at a computer program product comprising a program configured to perform a method for rendering images in a computer system and a computer readable media bearing the program. *Pg. 11, lines 4-28*. The claim further states that this method comprises receiving a multi-image file, selecting an image for display from the multi-image file, and displaying the selected image. *E.g., figs. 3A-3B; pg. 3, lines 21-25*. The multi-image file in this claim comprises a plurality of independent images including a primary image and at least one secondary image. *E.g., figs. 5-7; pg. 5, lines 1-13, pg. 7, lines 6-15*.

Claim 19 is dependent on claim 16. Claim 19 further states that the primary image and the at least one secondary image comprise complementary layers. *E.g., pg. 5, lines 4-10*.

Claim 21 is dependent on claim 16. Claim 21 further states that the at least one secondary image overlays the primary image. *E.g., pg. 5, lines 4-10; pg. 8, lines 24-27.*

6. Grounds of Rejection to be Reviewed on Appeal

Applicant appeals all final rejections.

7. Argument

Applicant expressly states that the rejected claims do not stand or fall together. For purposes of this appeal: Group 1 consists of claims 1-21; Group 2 consists of claims 1-12, 19, and 21 (i.e., the claims presented in the October 2006 Amendment); and Group 3 consists of claims 16-21 (i.e., the claims currently rejected under Section 101).

I. Overview of Invention

A brief overview of Appellant's invention in light of existing art will be helpful in appreciating the issues herein. As described in the Background section, many web sites contain a graphical navigation interface, such as a menu pane. Typically, menu panes contain a number of graphical elements representing potential choices. Each graphical element, in turn, consists of a separate image, usually encoded according to the GIF or JPEG standards. Although each image requires a relatively small amount of storage space, a typical menu pane comprises dozens of individual graphical elements. The sheer volume of these images creates many problems. For example, the tracking, maintaining, and naming of these files imposes significant administrative burdens on the web site developer. The volume of images also increases the number of server connections and network traffic because each individual file must be downloaded from the web server computer.

As further explained in the Background section, these problems are exasperated when web site developers try to make their graphical navigation interfaces dynamic. For example, one common technique used to generate dynamic interfaces uses multiple versions of each graphical element, with each version having small variations in color and/or shape. These images can be linked together with scripting engines to produce a controlled animation effect called a 'rollover.' Thus, this techniques requires the use of at least three separate image files for each element: one image showing the initial menu item, a second image for display when the end user passes a mouse cursor over the menu item; and a third image to the product submenu items. This, in turn, means that for a simple interface with five choices, the web developer will need to manage fifteen separate image files. Those skilled in the art will appreciate that this complexity is further

magnified by each new interface element; the complex interfaces at a major web sites can often require hundreds or even thousands of small image files, every one of which must be created, tracked, maintained, and transmitted.

The present invention provides a more-robust, more-flexible way to manage this dynamic content by introducing “multi-image files.” As described and explicitly claimed, these multi-image files comprise a single file containing multiple, independent images.¹ Thus, a browser implementing the present invention only has to retrieve one file to present a dynamic interface effect. The present invention also includes a mark-up language tag that allows the web page designer to specify, directly and via script, which picture from the file to display.

Multi-image files offer numerous advantages over conventional image delivery formats. For example, the ability of multi-images files to allow many graphical elements to be stored in a single file reduces the number of server connections needed to download a graphically rich site and increases apparent speed. Another advantage is that web page developers can use scripting languages, such as JavaScript, to create animations and overlay multiple images from a single multi-image file more easily and more robustly than possible using conventional animated-GIF techniques because the multi-image files of the present invention eliminate overhead associated with preloading and referencing multiple images. Yet another feature and advantage is that the multi-image files may contain different size and shaped images. This allows the web page designer to identify and segregate those portions that contain dynamic elements from those portions that are static. This feature may be particularly desirable on devices with limited processing power and/or storage.

¹ See *Claim 1* (“receiving a multi-image file, the multi-image file comprising a plurality of images adapted for cooperative display”); *claim 9* (“a multi-image file, the multi-image file comprising a plurality of images including a primary image and at least one secondary image adapted for cooperative display”); *claim 13* (“receiving a multi-image file, the multi-image file comprising a plurality of images including a primary image and at least one secondary image”); and *claim 16* (“receiving a multi-image file, the multi-image file comprising a plurality of images including a primary image and at least one secondary image”).

II. Rejections under Sections 102 and 103

A. At Least One Claim Element Is Not Taught or Suggested By Any Reference

A reference can only anticipate a claimed invention if that reference teaches each and every element of the claim. *MPEP* § 2131. Similarly, a combination of references can only obviate an invention if the suggested combination teaches or suggests all of the claimed limitations. *MPEP* § 2142. Taken together, if none of the references teach or suggest a particular limitation, then the claimed inventions can neither be anticipated or obviated by any combination of the cited art.

1. Munroe

a. Group 1

The Examiner rejected claims 1, 7-11, and 13-21 under 35 U.S.C. § 102(b) as anticipated by Munro et al, US 2002/0089549. This publication describes a browser plug-in that displays multiple bitmap images. Significantly, however, in order to display those images, the plug-in has to individually retrieve each image from the server. *E.g., Munro*, ¶ 0008 (distinguishing the prior art because “none of these applications allow for separate images, each image having an independent data file, to be concurrently displayed”); ¶ 0045 (explaining that “in this example, the multiple image viewer only had to download two data files . . .”); and ¶ 0050 (stating that “the compressed images are stored in a file structure”)(emphasis added). The present invention, in contrast, contains multiple, independent images in a single file.² In this way, a browser implementing the present invention receives all the images necessary to present a dynamic effect in one package.

The Examiner cites paragraph [0008] as teaching the claimed multi-image files. Applicant respectfully submits that the Examiner's interpretation of this paragraph is incorrect; the cited section of Munro describes a single image file that is rendered as a mosaic of multiple pictures, and not a single file containing multiple, independent images. The Examiner also cites

² See 1 *infra*.

paragraphs [0049]-[0050], which add that the images are stored on the server such that the server can generate multiple resolutions upon request. In each case, however, the browser plug-in has to individually receive each of the different images. *Munroe*, ¶ 0049 (“*If . . . the user zooms in on an image above the predetermined setting, then the multiple-image viewer would request the next higher resolution. . . .*”) Put another way, Munroe merely teaches that the server can transcode an image into multiple resolutions. However, it is silent about putting multiple, independent images into a single, multi-image file.

b. Group 2

Group 2 adds that the multiple images be “adapted for cooperative display,”³ “comprise complementary layers,”⁴ or “overlay[] the primary image.”⁵ That is, in the Group 2 claims:

the secondary images 204-206 may be displayed together with the primary image 202 or another secondary image 204-206 to form a combined image, displayed individually in place of the primary image 202, or some combination thereof. That is, the primary image 202 and secondary images 204-206 may be displayed together as complementary layers, as alternative versions of the same image, or a combination of cooperative and alternative elements.

Specification, page 5, lines 5- 10. Even assuming the different resolutions in Munroe constitute multiple, independent images, those resolutions are certainly not adapted for cooperative display, nor constitute complementary layers, nor overlay the primary image. Instead, the browser plug-in described in Munro will either display a high resolution image or a low resolution image, but not both at once.

³ Claim 1 (“*receiving a multi-image file, the multi-image file comprising a plurality of images adapted for cooperative display*”) and Claim 9 (“*a multi-image file, the multi-image file comprising a plurality of images including a primary image and at least one secondary image adapted for cooperative display*”).

⁴ Claim 19 (“*wherein the primary image and the at least one secondary image comprise complementary layers*”).

⁵ Claim 21 (“*wherein the at least one secondary image overlays the primary image*”).

2. Miller

Miller also fails to teach these elements. Instead, Miller is directed at a method of customizing a digital camera to accommodate user preferences, such as color background, icons and names. However, Miller does not describe how the resulting images will be stored and transmitted, other than brief references to the PCMCIA, compact flash, memory stick, and JPEG standards.

3. Tucker

Tucker similarly fails to teach these elements. Instead, Tucker directed at a content delivery system that utilizes editing, caching and compressing to speed the delivery of content from a network, such as the Internet, while conserving bandwidth usage. Although Tucker discusses transcoding files, it does not teach or suggest transcoding into files containing a plurality of independent images, much less images adapted for cooperative display.

III. Rejections under Section 101

A. Group 3

Claims 16-21 are directed a computer program product, comprising a program configured to perform a method for rendering images in a computer system and “a computer readable media bearing the program.” Appellant believes that this language is substantially identical to that suggested the Patent Office’s most-recent published guidelines. *MPEP* § 2106.01(I), 8th ed. no. 5 (Aug. 2006)(explaining that “a computer-readable medium encoded with a computer program is a computer element which defines structural and functional relationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, *and is thus statutory.*”)(*emphasis added*).

Appellant notes that a recently-argued Federal Circuit case, *In re Nuijten*, may be relevant to the analysis of claims 16-21 under Section 101. Accordingly, Appellant reserves the right to comment in more detail after the Federal Circuit releases this decision.

8. Claims Appendix

1. A method of displaying a web page, comprising:

receiving a multi-image file, the multi-image file comprising a plurality of independent images adapted for cooperative display;

receiving a web page containing a markup language tag, the markup language tag comprising a code specifying which of the plurality of images should be displayed; and

displaying the web page.
2. The method of claim 1, further comprising:

parsing the multi-image file for an information header, the information header containing an image name for each image in the multi-image file.
3. The method of claim 2, wherein the information header further comprises a primary image indicator.
4. The method of claim 2, wherein the information header further comprises an image location for each image in the multi-image file.
5. The method of claim 1, further comprising:

in response to an event, displaying the web page with a secondary image.

6. The method of claim 5, wherein the event comprises a mouse-over event.
7. The method of claim 1, wherein the multi-image file comprises a menu element.
8. The method of claim 1, wherein the markup language tag comprises an HTML code.
9. A web page, comprising:
 - a multi-image file, the multi-image file comprising a plurality of independent images including a primary image and at least one secondary image adapted for cooperative display; and
 - a markup language tag, the markup language tag comprising a code specifying which of the plurality of images should be displayed.
10. The web page of claim 9, wherein the multi-image file further comprises an image descriptor associated with the primary image and an image descriptor associated with the at least one secondary image.
11. The web page of claim 10, wherein the image descriptor comprises an image name, a primary image indicator, and a default size.

12. The web page of claim 9, wherein the multi-image file further comprises an information header containing at least one image descriptor.

13. A method of displaying images, comprising:

receiving a multi-image file, the multi-image file comprising a plurality of independent images including a primary image and at least one secondary image;
selecting an image for display from the multi-image file; and
displaying the selected image.

14. The method of claim 13, wherein the multi-image file further comprises a first image descriptor associated with the primary image and a second image descriptor associated with the secondary image.

15. The method of claim 13, wherein the first image descriptor comprises a primary image indicator.

16. A computer program product, comprising:
- (a) a program configured to perform a method for rendering images in a computer system, the method comprising:
- receiving a multi-image file, the multi-image file comprising a plurality of independent images including a primary image and at least one secondary image;
- selecting an image for display from the multi-image file; and
- displaying the selected image; and
- (b) a computer readable media bearing the program.
17. The computer program product of claim 16, wherein the program comprises a web browser.
18. The computer program product of claim 16, wherein the signal bearing media is chosen from the group consisting of information permanently stored on non-writable storage media; alterable information stored on writable storage media; and information conveyed to a computer by a communications medium.
19. The computer program product of claim 16, wherein the primary image and the at least one secondary image comprise complementary layers.
20. The computer program product of claim 16, wherein the primary image and the at least one secondary image comprise alternative versions of an image.

21. The computer program product of claim 16, wherein the at least one secondary image overlays the primary image.

9. Evidence Appendix

None


10. Related Proceedings Appendix

None

For each of the foregoing reasons, Appellant submits that the Examiner's final rejections of claims 1-21 were erroneous, and respectfully requests reversal of these decisions.

Date: March 14, 2007

Respectfully submitted,

By 

Grant A. Johnson
Registration No.: 42,696

From:

IBM Corporation
Intellectual Property Law
Dept. 917, Bldg. 006-1
3605 Highway 52 North
Rochester, MN 55901

Telephone: (507) 253-4660
Fax: (507) 253-2382